

# MODELS HV2730B & HV2736B DOWNDRAFT BLOWER SYSTEM

## **READ AND SAVE THESE INSTRUCTIONS**

#### **WARNING**

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- 1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number in the warranty.
- Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel-burning equipment to prevent backdrafting manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- 5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 6. Do not use this unit with an additional speed control device.
- 7. Ducted fans must always be vented to the outdoors.
- 8. To reduce the risk of fire, use only metal ductwork.
- Do not install this product with the activating switch directly behind a burner or element. Minimum distance between the switch and the edge of the burner should be 4 inches.
- 10. Loose-fitting or hanging clothing should never be worn when operating this appliance. They may be ignited by burners/ elements on cooktop.
- 11. Children should not be left alone or unattended in the area where this appliance is in use.
- 12. When flaming foods, turn the blower OFF. An operating blower may spread the flames.

#### TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

- Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- 2. Always turn hood ON when cooking at high heat or when cooking flaming foods.
- Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- Use proper pan size. Always use cookware appropriate for the size of the surface element.

TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING<sup>a</sup>:

### **WARNING**

- A. SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immedi ately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- B. NEVER PICK UP A FLAMING PAN You may be burned.
- C. DO NOT USE WATER, including wet dishcloths or towelsa violent steam explosion will result.
- D. Use an extinguisher ONLY if:
  - 1. You know you have a Class ABC extinguisher, and you already know how to operate it.
  - The fire is small and contained in the area where it started.
  - 3. The fire department is being called.
  - 4. You can fight the fire with your back to an exit.
- <sup>a</sup> Based on "Kitchen Firesafety Tips" published by NFPA.
- 12. This unit must be grounded

#### **CAUTION**

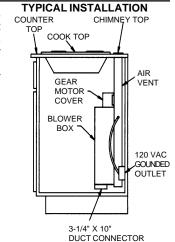
- 1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
- 3. Clean filters and grease-laden surfaces frequently.
- 4. Do not repair or replace any part of this appliance unless specifically recommended in this manual. All other servicing should be done by a qualified technician.
- Please read specification label on product for further information and requirements.

#### **PLANNING**

This downdraft blower system is designed to be used to exhaust airborne contaminants when cooking with a variety of gas or electric cooktops. It can be mounted in island, peninsula, or conventional wall locations.

This unit can be easily installed following these basic steps:

- Cut out the countertop opening.
- Mount the unit in the cabinet.
- Connect the ductwork and electrical.
- Install the cooktop.



INSTALLER: Save this manual for Electrical Inspector and Homeowner to use. HOMEOWNER: Use and Care Information on Page 5.

#### **PLANNING** - (continued)

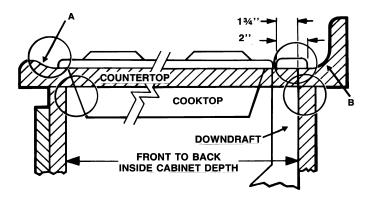
**Note:** The high level of air flow of this appliance may affect the gas flame on some types of gas cooktops. This is NORMAL and will cause no harm, but can be corrected by lowering the speed of the blower.

#### **SPECIFICATIONS**

| VOLTS | AMPS | CFM | DUCT       |
|-------|------|-----|------------|
| 120   | 4.0  | 500 | 3-1/4 X 10 |

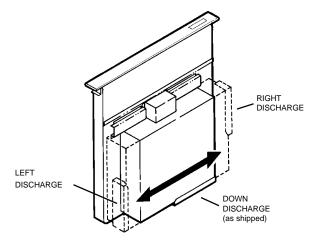
#### TAKE MEASUREMENTS

- Refer to the cooktop installation instructions for dimensions of cooktop, countertop cut-out, and cabinet requirements. The Model 2730 will fit in most 30" wide cabinets and the Model 2736 will fit in most 36" wide cabinets. However, it is recommended that oversized cabinets be used for easier installation.
- 2. Cooktop depth can vary greatly from one to another. This may cause the fit of these two appliances to be rather tight.

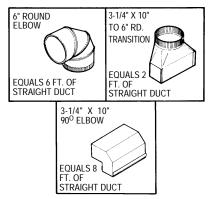


Pay special attention to the areas of potential interference highlighted above. A countertop with (A) a raised lip and/or (B) a backsplash may not allow enough flat countertop for a proper installation. Note that 2" of flat countertop is required behind cooktop and that 1-3/4" is necessary between the back edge of the cooktop and the inside of cabinet back.

#### PLAN THE DUCTWORK



- This downdraft blower system is designed for use with 3-1/4" x 10" ductwork (can be transitioned to 6" round). Three different discharge directions are available with side-to-side adjustment for accurate alignment of ductwork.
- 2. For best performance: Choose the ducting option which allows the shortest length of ductwork and a minimum number of elbows and transitions. Check location of floor joists, wall studs, electrical wiring or plumbing for possible interference. NOTE: The unit is shipped with the 3-1/4" x 10" discharge facing DOWN. See "CHANGING BLOWER DI-RECTION" on page 3, if necessary.



3. The system will operate most efficiently when the ductwork does not exceed 40 feet of equivalent duct. The chart, above, shows equivalent feet of elbows and transitions. The number of feet of straight duct plus the equivalent feet of transitions and/or elbows to be used should equal 40 feet or less.

NOTE: The equivalent feet of various roof and wall caps has been taken into consideration. Do not include them in this calculation.

#### PLAN THE WIRING

- The downdraft blower system draws 4 AMPS and requires a 120 VAC. 60 Hz circuit.
- 2. The unit has a 2 ft. long power cord with a 3-pronged plug. Plan to provide a grounded outlet in a location which will allow the unit's power cord to reach. (Note: If the Model 2730 is being installed in a 30" wide cabinet or the Model 2736 is being installed in a 36" wide cabinet, the outlet cannot be located on the back wall of cabinet.) Outlet may also be wall-mounted, with access hole in cabinet.

#### **PREPARATION**

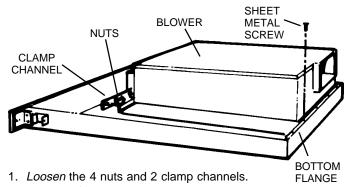
#### **CHANGING BLOWER DISCHARGE (Optional)**

The blower is shipped with its discharge facing DOWN. Follow these steps ONLY if:

- the position of the blower discharge needs to be moved so ductwork does not interfere with floor joists, plumbing or wiring below.
- it is necessary to rotate the blower discharge to the RIGHT or LEFT.

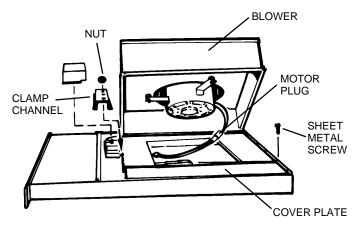
Place the unit on its back on a table or work surface.

#### **DOWN DISCHARGE - MOVING BLOWER LEFT OR RIGHT**



- 2. Slide blower to desired position.
- 3. Use supplied cover plate to close open space (if any).
- 4. Tighten nuts to secure top of blower and use sheet metal screws through bottom flange to secure bottom of blower.

#### **LEFT OR RIGHT DISCHARGE**



- 1. Remove the 4 nuts and 2 clamp channels.
- Carefully lift blower and disconnect motor plug if necessary. Reposition blower and RECONNECT MOTOR PLUG.
- 3. Use supplied cover plate to close open space (if any).
- 4. Replace clamp channels and use nuts to secure the blower in its new position.
- Use sheet metal screws through bottom flange to secure bottom of blower.

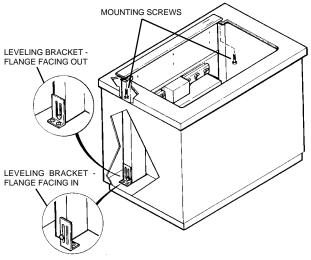
#### **CUT COUNTERTOP OPENING**

- Lay out and cut the cooktop cut-out far enough FORWARD so downdraft will fit behind it.
- 2. Set cooktop in place and slide it as far forward as possible. Center and square it with edges of countertop.



- Place the plastic template against the back flange of the cooktop and center it. Trace around template to mark the downdraft opening.
- 4. Remove cooktop from countertop.
- Cut downdraft opening. Be careful not to chip edges of countertop.

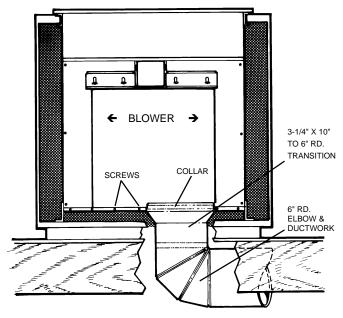
#### **MOUNT THE UNIT**



- Set downdraft into opening. Extend leveling brackets to floor of cabinet so downdraft sits straight. (Note: Leveling brackets can be removed and re-attached in other positions. Bottom flange may have to face inward in tight cabinet installations.)
- Secure the downdraft to the countertop as follows: Hold the downdraft against the back of countertop cut-out and tightening the 2 mounting screws (one on each end of unit) on underside of countertop. Use a wood shim between screw and underside of granite countertops.
- Screw leveling brackets to bottom of cabinet. Tighten screws holding leveling bracket to unit on each side.

#### INSTALL DUCTWORK

**CAUTION -** BEFORE CUTTING HOLE IN CABINET FOR DUCT-WORK: Check for interference with floor joists, wall studs, electrical wiring or plumbing.



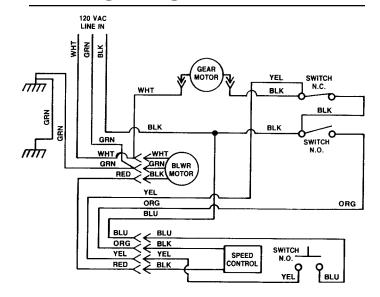
- Cut hole in cabinet as well as holes in wall or floor as necessary.
- Mount the roof or wall cap and work back towards the cabinet, attaching all ductwork, elbows and transitions as previously planned. Tape all ductwork connections to make them secure and air tight.
- Connect ductwork (and transition, if required) to downdraft. If necessary, LOOSEN nuts and screws that hold the blower in place, and slide blower left or right to meet ductwork. Retighten screws and nuts.

**Note:** A 3-1/4" x 10" collar is provided for installers who prefer to rivet the ductwork to the unit. This will allow blower to be removed and replaced easily in service situations without disturbing ductwork.

#### **INSTALL ELECTRICAL WIRING**

- Mount a standard wiring box, with 3-pronged receptacle, inside the cabinet. Make sure the downdraft's power cord can easily reach it.
- Run appropriate power cable into cabinet and connect it to receptacle.
- 3. Plug the downdraft's power cord into the outlet.

#### WIRING DIAGRAM



#### **INSTALL COOKTOP**

 Align the cooktop with the downdraft and fasten cooktop in place.

**Note:** Accurate alignment of cooktop and downdraft is necessary to ensure that there is no interference when air vent is raised and lowered. There should be a gap of 1/32"-1/16" between the back of the cooktop and the front of the downdraft cover.

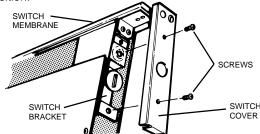
#### **ADJUSTMENT**

The downdraft is factory-adjusted for proper operation. However, shipping and handling may affect the position of the activating switch.

To adjust position of activating switch:

WARNING: To avoid possible electrical shock, personal injury or death - Disconnect electrical power.

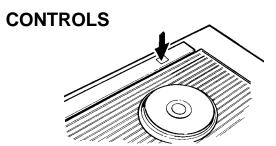
- 1. If downdraft is plugged into electrical outlet, unplug it.
- 2. Lift air vent straight up and cock it slightly so it remains in the UP position.



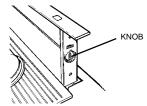
- 3. Remove switch cover from right end of air vent.
- 4. Loosen the 2 screws holding the switch bracket in place. Position switch bracket so that activating switch just comes in contact with underside of switch membrane. Tighten screws.
- Replace switch cover, gently lower air vent into chimney, and plug in power cord. Re-connect electrical power and check operation.

#### **USE AND CARE**

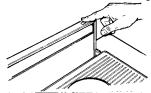
Always turn the downdraft blower on before you begin cooking to establish an air flow in the kitchen. Let the blower run for a few minutes to clean the air after you turn the cooktop off. This will keep the whole kitchen cleaner and brighter.



Turn the downdraft blower ON by pressing down on the activating switch. The air vent will rise.



The blower can be turned ON or OFF and its speed can be adjusted with the recessed knob on the right side of the air vent.



Turn the downdraft blower OFF by pressing the activating switch again. The air vent will go down and the blower will shut OFF.

Note: For most convenient operation, set the blower to your favorite speed. The blower will come on to this speed whenever the activating switch is pressed and the air vent rises.

#### **USE AND CARE - (Continued)**

#### **CLEANING**

WARNING: Always disconnect electric power supply before cleaning unit.

Use a mild detergent suitable for painted surfaces. DO NOT USE ABRASIVE CLOTH, STEEL WOOL PADS, OR SCOURING POWDERS. Vacuum blower to clean. Do not immerse blower in water.

Wash the 2 aluminum grease filters in a mild detergent solution or a dishwasher. Remove them from the air vent by grasping the tab at the top of each filter.

Note: The filters are different sizes. Be sure to replace them as removed, (wider one on the left), with tabs UP.

#### **SERVICING**

WARNING: Always disconnect electric power supply before servicing unit.

It may be necessary to remove the downdraft blower system from the cabinet in order to service components such as the blower motor or air vent mechanism.

Disconnect power to the cooktop and remove it first. Reverse the steps under "MOUNT THE UNIT" to remove the downdraft from the cabinet.

Service parts are available from your dealer or from Frigidaire Company Customer Relations Department, P.O. Box 7181, Dublin, OH 43071.

### **SERVICE PARTS**

### Models HV2730B & HV2736B **Downdraft Blower Systems**

| KEY NO.  | PART NUMBER          | DESCRIPTION  | QTY.   |
|----------|----------------------|--|--------|
| 1        | 93400038             | Bushing, 7/8"  | 1      |
| 2        | 99400061             | Bushing, Split Heyco, 5/8"   | 1      |
| 3        | 99400024             | Bushing, Heyco, 1/2"   | 1      |
| 4        | 93470012             | Roller   | 1 1    |
| 5<br>6   | 97011238<br>97010714 | Switch Assembly, Up/Down<br>Wire Harness, Speed Control                    | 1 1    |
| 7        | 99260491             | Nut, 3/8-32  |        |
| 8        | 99360165             | Knob   | 1      |
| 9        | 99100484             | Motor Isolator   | 3      |
| 10       | 97009972             | Lower Switch Bracket Assembly  | 1      |
| 11       | 97011293             | Green Ground Wire  | 1 1    |
| 12       | 97010993             | Wire Harness   | 1 1    |
| 16<br>17 | 98007642<br>98007780 | Back-up Plate<br>Crank   | 1 1    |
| 18       | 98008168             | Switch Cover   | Ιί     |
| 19       | 97011325             | Chimney Assembly with Slide (Model HV2730B)                                | 1      |
|          | 97011326             | Chimney Assembly with Slide (Model HV2736B)                                | 1      |
| 20       | 99080362             | Motor (with Capacitor-Key No. 73)  | 1      |
| 21       | 99020247             | Blower Wheel   | 1 1    |
| 22<br>23 | 98008167<br>99710032 | Scroll Box Extension<br>Spacer   | 1 3    |
| 23       | 97011379             | Top Mounting Bracket Kit   | 1 1    |
| 25       | 97011379             | Top Bracket Assembly, Right  | 1      |
| 26       | 97011449             | Top, Black (Model HV2730B)   | 1      |
|          | 97011450             | Top, Black (Model HV2736B)   | 1      |
| 28       | 97010991             | Scroll Box Assembly  | 1      |
| 29       | 97011443             | Gear Motor Cover   | 1 1    |
| 30       | 97010994<br>97010992 | Air Box Assembly (Model HV2730B)<br>Air Box Assembly (Model HV2736B)       | 1 1    |
| 31       | 98008150             | Scroll Box Cover   | Ιi     |
| 32       | 98008157             | Capacitor Strap  | i      |
| 33       | 97009786             | Filter Kit (Model HV2730B) (contains 2 filters)                            | 1      |
|          | 97009787             | Filter Kit (Model HV2736B) (contains 2 filters)                            | 1      |
| 45       | 99090905             | End Cap<br>Gearmotor   | 1 1    |
| 46<br>47 | 99080295<br>99110850 | Slide Strip  | 3      |
| 49       | 99150245             | Screw, #8-18 x .375 SLT HX WS HD   | 19     |
| 50       | 99150471             | Screw, #10-32 x .500 HX WS BDRH  | 2      |
| 51       | 99150491             | Screw, #8-18 x .375 SR PH TRH  | 10     |
| 52       | 99150488             | Screw, #8-18 x .500 No. 5 PH Trim  | 2      |
| 53       | 98008158<br>98008185 | Cover, Air Box Opening (Model 2730)<br>Cover, Air Box Opening (Model 2736) | 1 1    |
| 54       | 99260488             | Nut, 10-24   | 4      |
| 55       | 98008158             | Air Box Cover (Model 2730)   | i      |
|          | 98008185             | Air Box Cover (Model 2736)   | 1      |
| 56       | 97011500             | Gearmotor Bracket Assembly   | 1      |
| 57       | 98008159             | Leg Support  | 2      |
| 58<br>59 | 99150536<br>99250927 | Screw, 1/4-20 x 5/16<br>Washer, 1/4  | 5<br>2 |
| 60       | 99250927             | Screw, #8-32 x 1/2 PH HD MS  | 4      |
| 61       | 99160356             | Screw, #10-24 x 3/8 SH WH LOCK   | 1      |
| 62       | 99160361             | Screw, #10-24 x 3/8 PH FL HD LD  | 1      |
| 64       | 99260437             | Nut, 10-24 HEX KEPS  | 7      |
| 65       | 99260477             | Nut, 1/4-20 WHIZ LOCK  | 3      |
| 66       | 99380633             | U-Bolt, 10-24<br>Strain Relief   | 1 1    |
| 67<br>68 | 99400048<br>93260447 | Strain Relier<br>Nut, Hex Flange   | 1 1    |
| 70       | 98008415             | Wire Channel Clamp   | 2      |
| 71       | 93270493             | Wire Tie   | 3      |
| 73       | 99271000             | Capacitor  | 1      |
| 74       | 99160382             | Screw, 1/4-20 x 1.250 Hex. Hd.   | 2      |
| 75<br>84 | 99150415             | #8-18 x .250 PH TR HD BPT<br>Foam Seal (30")                               | 3<br>1 |
| 04       | 99100503<br>99100504 | Foam Seal (36")  |        |
| **       | 97011311             | Blower Assembly, Complete (Includes Key Nos.                               | '      |
|          |                      | 2, 9, 20, 21, 22, 28, 31, 32, 49, 58, 64, 65, & 73)                        |        |
| **       | 97011320             | Chimney Assembly, Complete (Model HV2730B)                                 |        |
| **       | 07044004             | (Includes Key Nos. 5, 8, 19, 45, 51, 52, & 71)                             |        |
|          | 97011321             | Chimney Assembly, Complete (Model HV2736B)                                 |        |
|          |                      | (Includes Key Nos. 5, 8, 19, 45, 51, 52, & 71)                             |        |

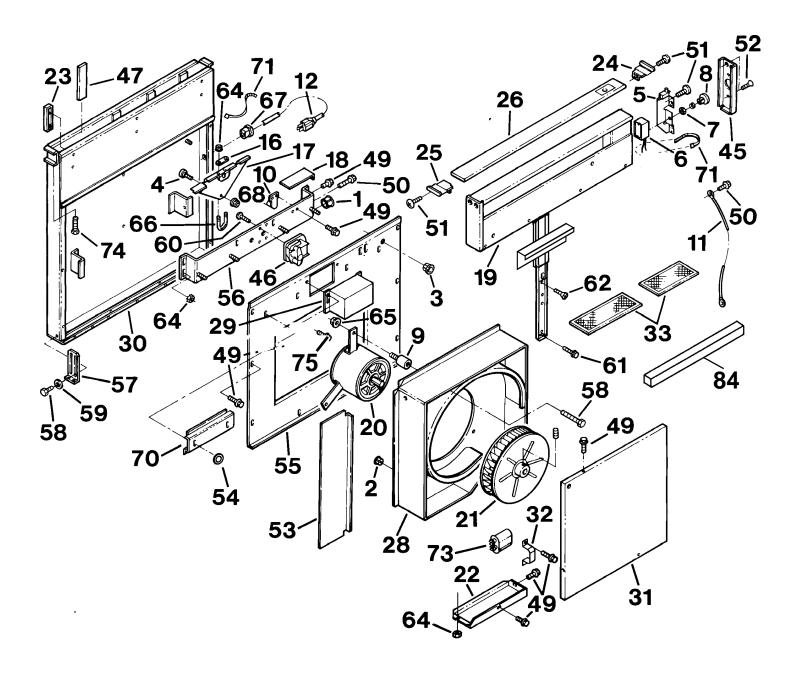
#### **OPTIONAL DOOR KITS**

| MODEL NO. | DESCRIPTION   |  |
|-----------|---------------|--|
| HT2730W   | 30" White     |  |
| HT2730S   | 30" Stainless |  |
| HT2736W   | 36" White     |  |
| HT2736S   | 36" Stainless |  |

<sup>\*</sup> Standard Hardware - May be purchased locally. \*\* Service Assembly - Contains numerous parts

### **SERVICE PARTS**

Models HV2730B& HV2736B Downdraft Blower Systems



#### FRIGIDAIRE RANGE WARRANTY

#### Your Frigidaire product is protected by this warranty

|  | WARRANTY<br>PERIOD                    | FRIGIDAIRE, THROUGH ITS AUTHORIZED<br>SERVICERS, WILL:  | THE CONSUMER WILL BE<br>RESPONSIBLE FOR:  |
|--|---------------------------------------|---|---|
|  | One year from original purchase date. | Pay all costs for repairing or replacing any parts of this appliance which prove to be defective in materials or workmanship. |   |
| LIMITED WARRANTY<br>(Applicable to the<br>State of Alaska) | Time period listed above.             | All of the provisions of the full warranty above and the exclusions listed below apply.                                       | Costs of the technician's travel to the home and any costs for pick up and delivery of the appliance required because of service. |

Your appliance is warranted by Frigidaire Home Products, a division of White Consolidated Industries, Inc. We authorize no person to change or add to any of our obligations under this warranty. Our obligations for service and parts under this warranty must be performed by Frigidaire Home Products Consumer Services or an authorized Frigidaire servicer.

#### \*NORMAL RESPONSIBILITIES OF THE CONSUMER

This warranty applies only to products in ordinary household use, and the consumer is responsible for the items listed below:

- 1. Proper use of the appliance in accordance with instructions provided with the product.
- 2. Proper installation by an authorized servicer in accordance with instructions provided with the appliance and in accordance with all local plumbing, electrical and/or gas codes.
- 3. Proper connection to a grounded power supply of sufficient voltage, replacement of blown fuses, repair of loose connections or defects in house wiring.
- 4. Expenses for making the appliance accessible for servicing, such as removal of trim, cupboards, shelves, etc., which are not a part of the appliance when it was shipped from the factory.
- 5. Damages to finish after installation.
- 6. Replacement of light bulbs and/or fluorescent tubes (on models with these features).

#### **EXCLUSIONS**

#### This warranty does not cover the following:

- 1. CONSEQUENTIAL OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.
  - Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
- 2. Service calls which do not involve malfunction or defects in workmanship or material, or for appliances not in ordinary household use. The consumer shall pay for such service calls.
- Damages caused by services performed by persons other than authorized Frigidaire servicers; use of parts other than Frigidaire Home Products Genuine Renewal Parts; obtained from persons other than such servicers; or external causes such as abuse, misuse, inadequate power supply or acts of God.
- 4. Products with original serial numbers that have been removed or altered and cannot be readily determined.

### IF YOU NEED SERVICE

Keep your bill of sale, delivery slip, or some other appropriate payment record. The date on the bill establishes the warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. You may also have other rights that vary from state to state. Service under this warranty must be obtained by following these steps, in order:

- 1. Contact Frigidaire Home Products Consumer Services or an authorized Frigidaire servicer.
- 2. If there is a question as to where to obtain service, call or write our Consumer Relations Department at:

Frigidaire Home Products Consumer Relations P.O. Box 212378 Augusta, Georgia 30917-2378 (800) 944-9044



Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by White Consolidated Industries, Inc. This warranty applies only in the 50 states of the U.S.A. and Puerto Rico.